

21

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/619,299	PARSCHE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Minh D. A	2821	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/6/2005.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--|--|

*Shih-Chao Chen* 11/14/05  
**SHIH-CHAO CHEN**  
**PRIMARY EXAMINER**

***Allowable Subject Matter***

1. Claims 1-23 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Prior art does not teach that, the radiating member being substantially tubular and defining a cavity therein', an impedance matching device electrically connected to the radiating member, the impedance matching device disposed to match an impedance of said radiating member with at least one impedance selected from the group consisting of an impedance of a signal source and an impedance of a load; and a conductor operatively connecting the radiating member to the impedance matching device', the impedance matching device, the conductor and at least a portion of the radiating member are integrally formed from a single conductive sheet in combination with all limitations recited in independent claims 1 and 17, claims 2-9 and 18-22 are allowed since these claims are dependent on claims 1 and 17.

Prior art does not teach that, the radiating member being substantially tubular and defining a cavity therein; a non-conductive slot extending from a first portion of the radiating member to a second portion of said radiating member and an impedance matching device electrically connect to the radiating member, the impedance matching device disposed to match an impedance of said radiating member with at least one impedance selected from the group consisting of an impedance of a signal source and an impedance of a load; an absolute value of a field impedance associated with the antenna is substantially less than 50 ohms in combination with all limitations recited in

Art Unit: 2821

independent claim 10, claims 11-16 are allowed since these claims are depending on claim 10.

Prior art does not teach that, a single radiation element comprise a continuous sheet of an electrically conductive material and having a slot extending from a first portion of the radiation element to second portion of the radiation element, the continuous sheet of the radiation element shaped to define a substantially tubular form and defining a cavity and a radiation pattern produced by the single radiation element is a lobed cardioid radiation pattern recited in independent claim 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takei et al (US 5,977,924) and McKinzie II et al. (US 20003/0011522) are cited to show a slot array antenna.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for

Art Unit: 2821

the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

*shih-chao chen* 11/14/05  
SHIH-CHAO CHEN  
PRIMARY EXAMINER

Examiner

Minh A

Art unit 2821

11/14/05